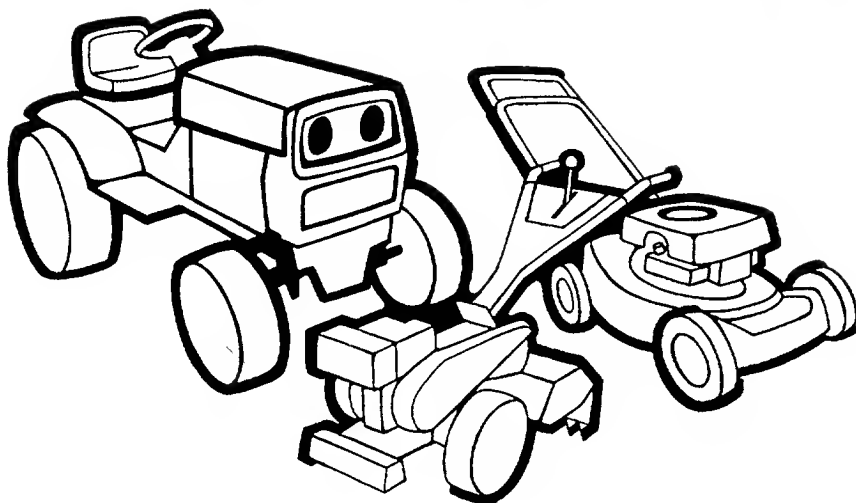


# OWNERS MANUAL



**22"  
SELF-  
PROPELLED  
ROTARY  
MOWERS**

**ASSEMBLY  
OPERATION  
MAINTENANCE  
PARTS LIST**

**Model Numbers  
124-280-000  
124-282-000**

**Important:  
Read Safety Rules and  
Instructions Carefully**

Thank you for purchasing an  
American built product.

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## LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.



**WARNING**

This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester muffler is available at your nearest engine authorized service center.



## WARNING

To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

# SAFE OPERATION PRACTICES FOR WALK-BEHIND MOWERS

## TRAINING

1. Read this owner's manual carefully in its entirety before attempting to assemble or operate this machine. Be completely familiar with the controls and the proper use of this machine before operating it. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. Your rotary mower is a precision piece of power equipment, not a plaything. Therefore, exercise extreme caution at all times.
3. Never allow children to operate a power mower. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
4. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, an object may have been overlooked and could be accidentally thrown by the mower in any direction and cause serious personal injury to the operator or any others allowed in the area.

## PREPARATION

1. Thoroughly inspect the area where the equipment is to be used. Remove all stones, sticks, wire, bones and other foreign objects which could be picked up and thrown by the mower in any direction and cause serious personal injury to the operator or any others allowed in the area.
2. Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
3. Do not wear loose fitting clothing that could get caught on the mower.
4. Check the fuel before starting the engine. Gasoline is an extremely flammable fuel. Do not fill the gasoline tank indoors, while the engine is running, or while the engine is still hot. Wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.
5. Disengage the self-propelled mechanism or drive clutch on units so equipped before starting the engine.
6. The blade control handle is a safety device. Never attempt to bypass its operation. Doing so makes the safety device inoperative and may result in personal injury through contact with the rotating blade. The blade control handle must operate easily in both directions.
7. Never attempt to make a wheel or cutting height adjustment while the engine is running.
8. Mow only in daylight or in good artificial light.
9. Never operate the equipment in wet grass. Always be sure of your footing. A slip and fall can cause serious personal injury. Keep a firm hold on the handle and walk, never run.

## OPERATION

1. Do not change the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.
2. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade can cause injury.
3. Stop the blade when crossing gravel drives, walks or roads.
4. After striking a foreign object, stop the engine, remove the wire from the spark plug, and thoroughly inspect the mower for any damage. Repair the damage before restarting and operating the mower.
5. If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
6. Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging the chute. The cutting blade continues to rotate for a few seconds after the engine is shut off. Never place any part of the body in the blade area until you are sure the blade has stopped rotating.
7. Before cleaning, repairing or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the spark plug to prevent accidental starting.
8. Do not run the engine indoors.
9. Mow across the face of slopes, never up-and-down. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes. Always be sure of your footing. A slip and fall can cause serious personal injury.
10. Always disconnect electric mowers (line operated) before cleaning, repairing or adjusting.
11. Never operate mower without proper guards, plates or other safety protective devices in place.

## MAINTENANCE AND STORAGE

1. Check the blade and engine mounting bolts at frequent intervals for proper tightness.
2. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
3. Never store the equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
4. To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease.
5. Check the grass catcher bag frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.



Reference to right or left hand side of the mower is observed from the operating position.



This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see separate engine manual for proper fuel and engine oil recommendations.

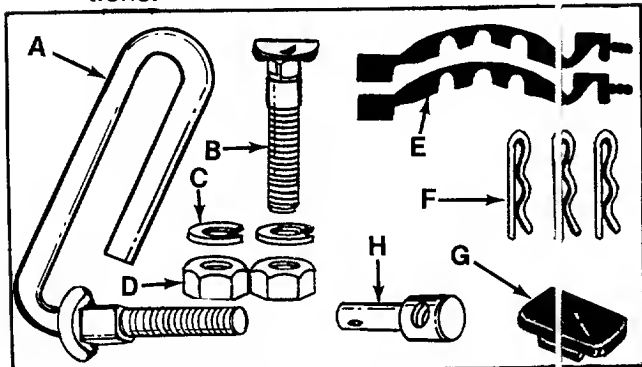


FIGURE 1.

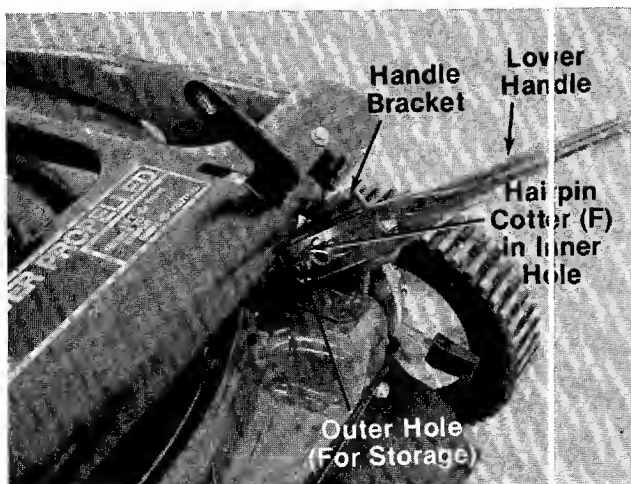


FIGURE 2.

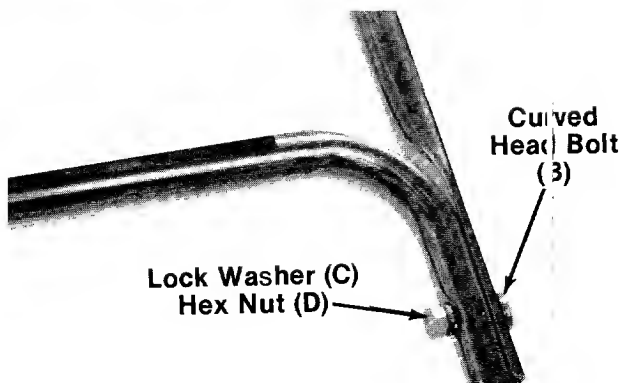


FIGURE 3.

## ASSEMBLY INSTRUCTIONS

### Contents of Hardware Pack: (See figure 1)

- A (1) Rope Guide Bolt
- B (1) Curved Head Carriage Bolt
- C (2) Lock Washers 5/16" I.D.
- D (2) Hex Nuts 5/16-18 Thread
- E (2) Cable Ties
- F (3) Hairpin Cotters
- G (1) Plastic Plug
- H (1) Ferrule
- I (1) Clutch Rod (Not Shown)
- J (1) Spring (Not Shown)

1. Remove lawn mower and loose parts from carton. Make certain all parts and literature have been removed from the carton before the carton is discarded.
2. Extend the throttle control cable (attached to the upper handle) and the brake cable (attached to the engine) and place on the floor. Be careful not to bend or kink control cables.
3. Attach the lower handle by placing the bottom holes in the lower handle over the weld pins on the handle mount brackets. Make certain the instruction label on the lower handle can be read from the operating position. Secure with hairpin cotters (F) in inner holes on weld pins. See figure 2.



There are two (2) holes in the handle mount brackets. Place the hairpin cotter in the inner hole for operation. Outer hole is for storage.

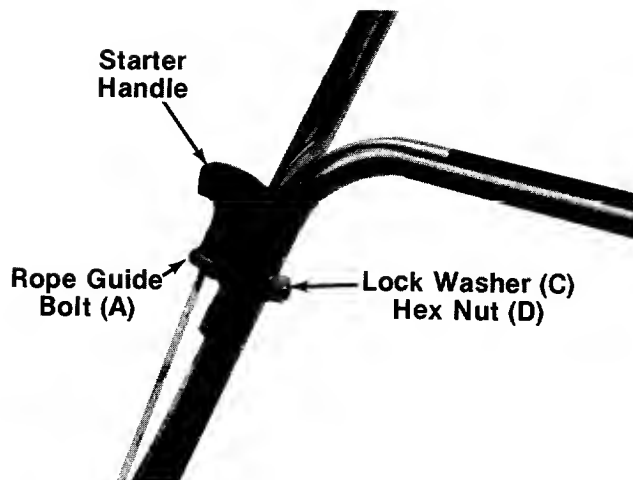


It may be necessary to bend the ends of the lower handle outward slightly to obtain a tight fit against the handle mount brackets.

4. Place the upper handle in position over the lower handle. The control housing must be on the left hand side of the handle. Secure the left hand side of upper handle using the curved head bolt (B), lock washer (C) and hex nut (D) as shown in figure 3.

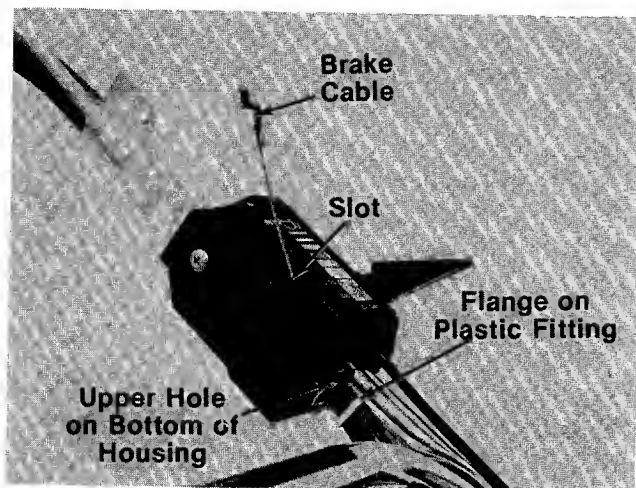


The right hand side of the handle will be secured with the rope guide bolt. However, left handed operators may assemble the rope guide bolt to the left side of the handle for easier starting.



**FIGURE 4.**

5. Insert the rope guide bolt (A) through the right hand side of upper and lower handle.
6. The starter rope is wound around the starter handle. Maintain the tension on the rope as you unwind it.
7. Slip the starter rope into the rope guide bolt as shown in figure 4. Secure the rope guide bolt with lock washer (C) and hex nut (D). If more slack is needed in the starter rope, disconnect and ground the spark plug wire. Depress the blade control handle and pull additional rope out from the engine.

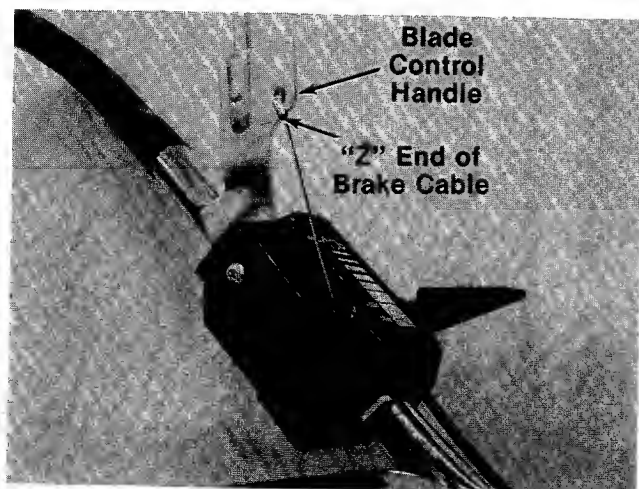


**FIGURE 5.**

8. Route the brake cable under the lower handle. Place the end of the brake cable into the upper hole on the bottom of the control housing, and through the slot in the side of the housing as shown in figure 5. The angle of the flange on the plastic fitting must be positioned downward as shown. Be careful not to bend or kink the cable.



Brake cable must be assembled as shown for proper blade brake operation.



**FIGURE 6.**

9. Snap the plastic fitting on the end of the cable into the control housing.
10. Hook the “Z” end of the brake cable into the hole in the blade control handle. See figure 6. If additional slack is needed in order to hook the cable into the handle, proceed as follows.

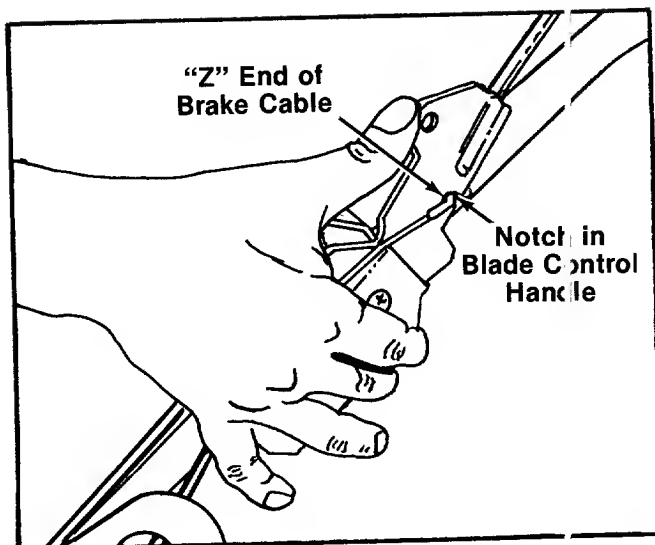


FIGURE 7.

- a. Hook the "Z" end of the cable into notch provided in the blade control handle. See figure 7.
- b. Squeeze blade control handle against upper handle.
- c. Release the blade control handle, unhook the cable from the notch and hook it into the hole in the blade control handle.

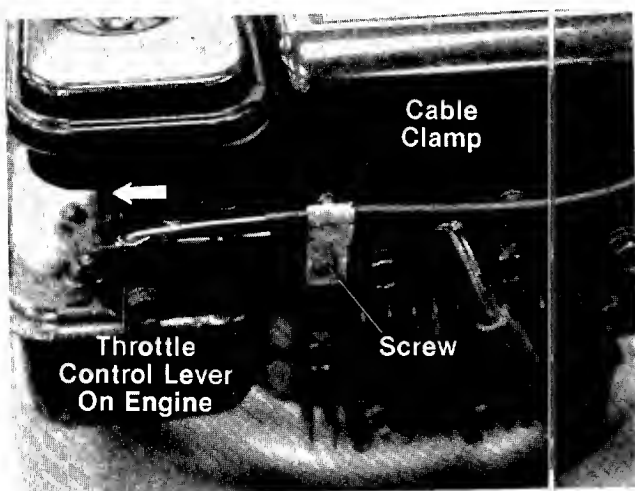


FIGURE 8.

11. Place the throttle control lever on the handle in "Fast" position.
12. Push the throttle control lever on the engine to the full open position (as far toward the outside of the unit as it will go) as shown in figure 8.

13. Hook the "Z" end of the throttle control cable into the hole in the control lever on the engine.

14. Remove the screw on the cable clamp shown in figure 8. Slip the control casing under the clamp. With the throttle lever on the engine still in the full open position, tighten the screw to secure the throttle control cable.

15. Loosen the screw on the clamp on the side of the engine. Secure the cable **away from the muffler**. Be careful not to bend or kink the cable. Tighten the screw.

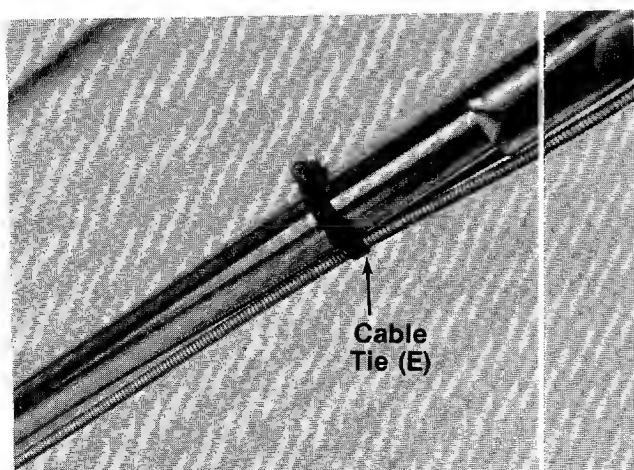


FIGURE 9.

16. Secure throttle control and brake cables to upper and lower handles with cable ties (E). See figure 9.

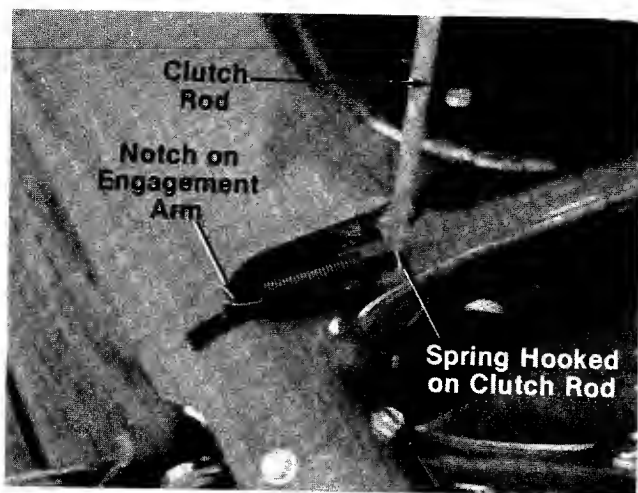


FIGURE 10.

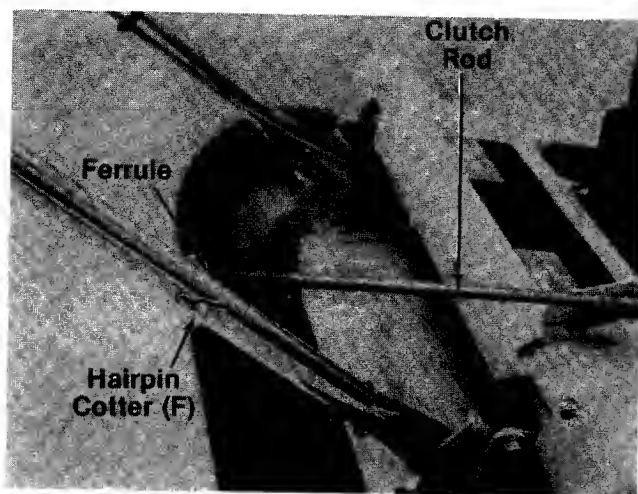


FIGURE 11.

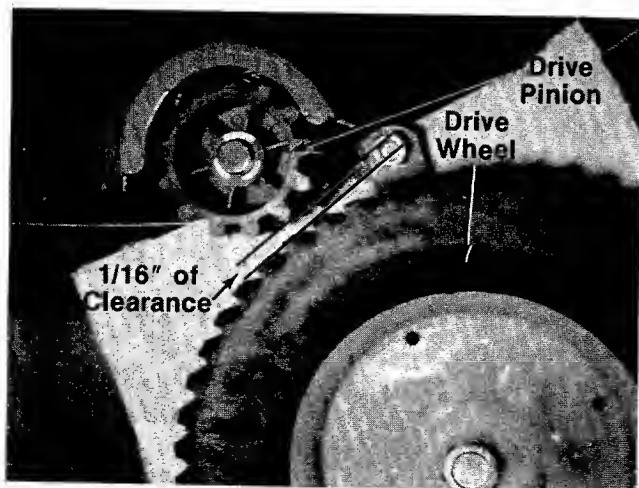


FIGURE 12.

## **NOTE**

The clutch rod must be readjusted each time the cutting height is changed. Therefore, set the desired cutting height (refer to page 10) before proceeding with the clutch rod assembly.

17. Thread the ferrule (H) onto the threaded end of the clutch rod (I) a few turns.
18. Hook the short end of the spring (J) into the notch on the engagement arm. See figure 10. Hook the longer end of the spring into the notch on the bent end of the clutch rod.
19. Pull the clutch rod forward and slip it into the slot on the engagement arm as shown in figure 10.
20. Pivot the clutch rod back. Raise the handle slightly and thread the ferrule onto the clutch rod until the ferrule lines up with the hole in the lower handle. Secure ferrule in handle with hairpin cotter (F) as shown in figure 11.
21. Check the clutch rod adjustment as follows. The drive pinions should be approximately 1/16" from the drive wheels when the clutch is disengaged (handle is **not** pushed forward). See figure 12.
- When the handle is lifted, the drive pinions should mesh with the gear tread tires.
22. Press the plastic plug (G) into the hole in the top rear of the deck. Refer to illustration on page 16, reference number 79.
23. Check **all** nuts and bolts for correct tightness.



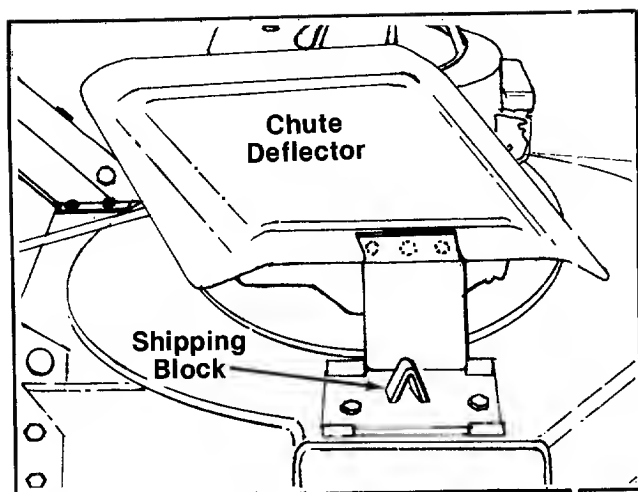


FIGURE 13.



### CAUTION

Please note that the chute deflector on your mower is in an upright position. It is held in that position by a shipping block. This block is used for shipping purposes only. It must be removed and discarded before your mower is put into operation. See figure 13.

## CONTROLS

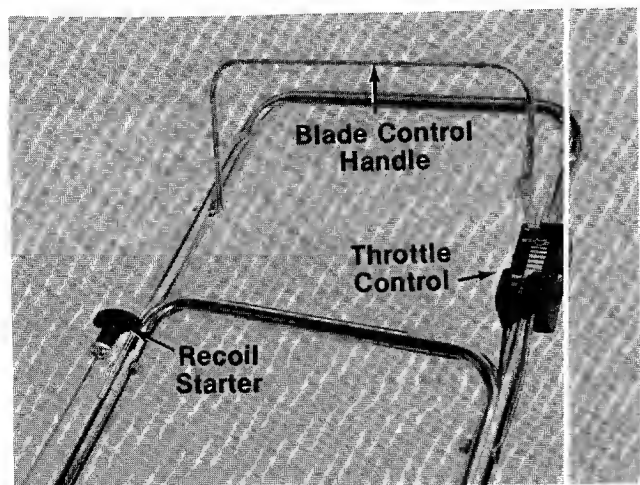


FIGURE 14.



### WARNING

The blade will be rotating whenever the engine is running.

### THROTTLE CONTROL

The throttle control is located on the left side of the upper handle. It is used to regulate the engine speed. The engine should be started with the engine in the FAST or START position.



### WARNING

The throttle control cannot be used to stop the engine.

### BLADE CONTROL HANDLE

#### WARNING

THIS CONTROL MECHANISM IS A SAFETY DEVICE. NEVER ATTEMPT TO BYPASS ITS OPERATIONS

The blade control handle is located on the upper handle of the mower. See figure 14. The blade control handle must be depressed in order to operate the unit. Release the blade control handle to stop the engine and blade.

### RECOIL STARTER

The recoil starter handle is attached to the handle. See figure 14. Stand behind the unit in the operating position to start the unit.

### SELF-PROPELLED DRIVE MECHANISM

To engage the drive mechanism, move the handle forward. The drive pinions will engage with the gear tread tires, and the unit will self-propel.

To stop the forward drive, lower the handle. The unit will be free-wheeling. Self-propelled drive is resumed when handle is raised.



2. Slip the ferrule out of the lower handle.
3. With an adjustable wrench, remove the hex nut, lock washer, axle bolt, belleville washer and rear wheel.
4. Reassemble in selected hole. The belleville washer must be assembled between the link and wheel bracket, with the cupped side of the washer against the deck. See figure 18.

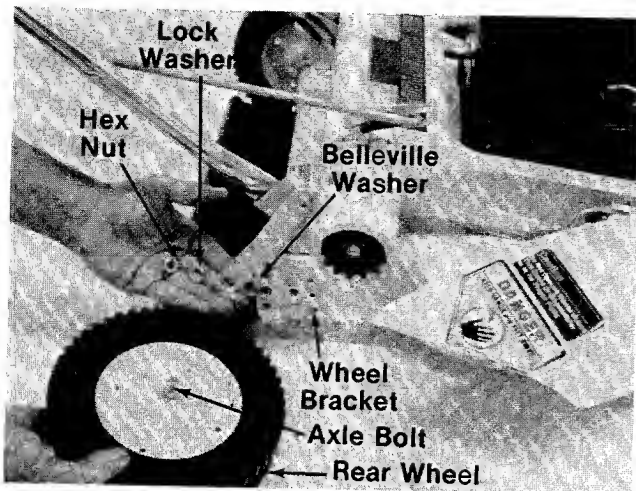


FIGURE 18.

5. Reassemble clutch rod, and check the clutch rod adjustment.



Clutch rod **must** be adjusted each time cutting height is changed.

### CLUTCH ROD ADJUSTMENT

The drive pinions should be approximately  $1/16''$  from the drive wheels when the clutch is disengaged (handle is **not** pushed forward). Refer to figure 11.

If there is not  $1/16''$  of clearance, proceed as follows:

1. Remove the cotter pin. See figure 10.
2. Pull the clutch rod and ferrule out of the lower handle.
3. Thread the ferrule on or off the rod as necessary.
4. Place ferrule back in position and secure with cotter pin. If the engagement and clearance are still not correct, repeat the above steps until  $1/16''$  of clearance is obtained and the drive mechanism engages properly.

### CHAIN ADJUSTMENT

Check for correct chain adjustment and alignment after first five to ten hours of operation. Adjust as follows:

1. Remove the hairpin cotter from the ferrule on the clutch rod.
2. Remove the ferrule and clutch rod from the lower handle.
3. Loosen (do not remove) the hex bolt on each side of the pinion pivot plate. See figure 19.

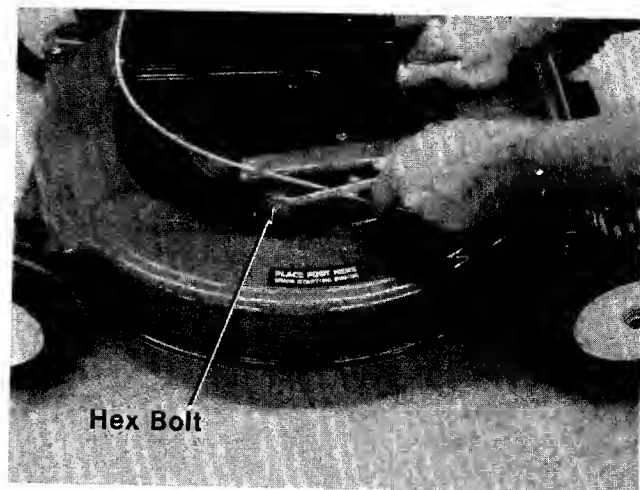


FIGURE 19.

4. Pull back on the left side of the pivot plate, by hand, until the proper chain tension is achieved. Tighten the hex bolt.
5. Pull back on the right side of the pivot plate until the clearance between the pinion and wheel is equal on both sides. Tighten the hex bolt.
6. Readjust the clutch rod.
7. Recheck for correct adjustment periodically.

### THROTTLE

If adjustment becomes necessary, the throttle control wire assembly can be reset as follows:

1. Loosen, but do not remove, screw securing throttle control wire assembly at engine. See figure 7.
2. Move throttle control lever on handle to "FAST" position.
3. Move control lever on engine to full open position. Retighten screw to secure throttle control wire assembly.

## CARBURETOR ADJUSTMENTS



**WARNING**

If any adjustments are made to the engine while the engine is running (e.g. carburetor), keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude and load.

Refer to the separate engine manual packed with your mower for carburetor adjustment information.

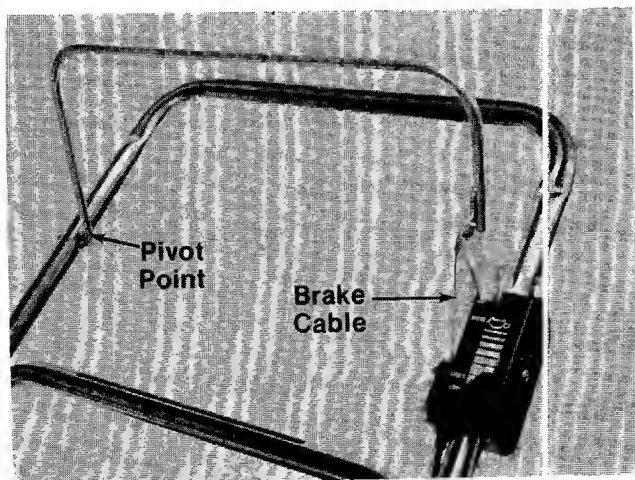
## LUBRICATION



**IMPORTANT**

Always stop engine and disconnect spark plug wire before cleaning, lubricating or doing any kind of work on lawn mower.

**Blade Control**—Lubricate the pivot points on the blade control handle and the brake cable at least once a season with light oil. See figure 20. The blade control must operate freely in both directions.



**FIGURE 20.**

**Chute Deflector**—The torsion spring and pivot point should be lubricated periodically with light oil to prevent any rust or binding. Deflector must work freely.

**Wheels**—Mower may be provided with ball bearing wheels. Lubricate at least once a season with light oil. Also, if the wheels are removed for any reason, lubricate the surface of the axle bolt and the inner surface of the wheel with light oil. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

**Engine**—Follow engine manual for lubrication instructions.

**Throttle**—Periodically lubricate throttle control lever and throttle wire assembly with a few drops of light oil for ease of operation.

**Chain**—The chain should be lubricated periodically with a few drops of light oil to prevent any rust or binding. Use very little or no oil if unit is being used in a dusty or sandy area.

## MAINTENANCE



**CAUTION**

When tipping the unit, empty the fuel tank and keep engine spark plug side up.

### CUTTING BLADE

#### A. Removal for Sharpening or Replacement



**WARNING**

Be sure to disconnect and ground the spark plug wire before working on the cutting blade to prevent accidental engine starting.

Remove the large bolt and lock washer which holds the blade and adapter to the engine crankshaft. Remove the blade and adapter from the crankshaft.

If the blade or blade adapter needs replacing, remove the two small bolts, lock washers and nuts which hold the blade to the adapter.



**CAUTION**

Periodically inspect the blade adapter for cracks, especially if you strike a foreign object. Replace when necessary.

#### B. Sharpening

Remove the cutting blade by following the directions of the preceding section.

## OPERATION



FIGURE 15.

Keep hands and feet away from the chute area on cutting deck. See figure 15.



### NOTE

For shipping purposes your mower is set with the wheels in a low cutting height position. For best results raise the cutting position until it is determined which height is best for your lawn. See cutting height adjustment section.

### BEFORE STARTING

1. Fill sump with oil as instructed in the separate engine manual packed with your unit.
2. Fill fuel tank, using clean, fresh, unleaded, low-lead or regular grade leaded gasoline. Fill tank completely!

DO NOT MIX OIL WITH GASOLINE.

3. Attach spark plug wire to spark plug.
4. Before each use, check drive assembly adjustment. When the handle is lifted, the clutch rod is moved to the self-propelled position. The black nylon drive pinions should mesh simultaneously with the gear tread tires. When the handle is released, the pinions should clear the wheels by approximately 1/16". See clutch rod adjustment on page 11 for further details.



### WARNING

To make sure the clutch rod has been adjusted properly, take the following precaution when using your unit for the first time after making a clutch rod adjustment. Face the mower against a solid object such as a wall, fence, etc. Start the unit, and if it moves forward with the handle down in the freewheeling position, shut the engine off promptly. Refer to page 11 for further instructions on clutch rod adjustment.

### TO START ENGINE AND ENGAGE BLADE

1. Move the throttle control lever to FAST or START position.
2. Standing behind the unit, depress the blade control handle and hold it against the upper handle as shown in figure 16.
3. Grasp the recoil starter handle as shown and pull up rapidly. Return it slowly to the rope guide bolt.
4. After engine starts, move throttle control to desired engine speed.

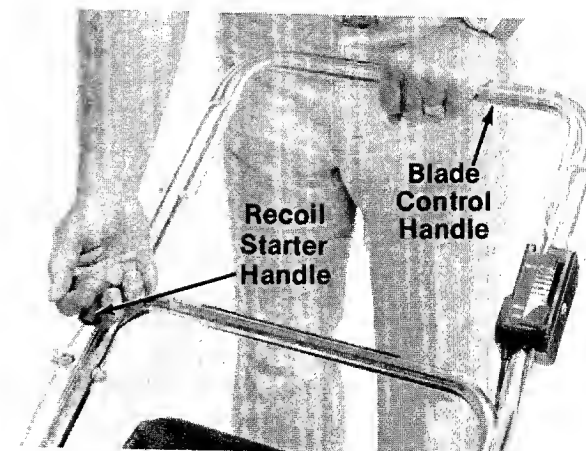


FIGURE 16.

### TO STOP ENGINE AND BLADE

1. Release the blade control handle to stop the engine and blade.



### WARNING

The blade continues to rotate for a few seconds after the engine is shut off.

2. Disconnect the spark plug wire and ground it against the engine to prevent accidental starting while equipment is unattended.

## USING YOUR ROTARY MOWER

Be sure that lawn is clear of stones, sticks, wire, or other objects which could damage lawn mower or engine. Such objects could be accidentally thrown by the mower in any direction and cause serious personal injury to the operator and others.

Operate a new engine at intermediate speeds and light load for the first few hours as you would a new automotive engine.

For best results, do not cut wet grass because it tends to stick to the underside of the mower, preventing proper discharge of grass clippings, and could cause you to slip and fall. New grass, thick grass or wet grass may require a narrower cut. Blade speed should be adjusted to the condition of the lawn.

The best mowing pattern is one that allows the clippings to discharge towards the uncultivated part of the lawn. This permits recutting of the clippings to further pulverize them. When cutting high weeds, discharge towards cut portion, then recut at right angles to first direction.

For best results, cut off one-third or less of the total length of the grass. Lawn should be cut in the fall as long as there is growth.

This mower is designed to be operated at full throttle to give you the best cut and do the most effective job of bagging the cut grass.



### IMPORTANT

If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower. Extensive vibration of the mower during operation is an indication of damage. The unit should be promptly inspected and repaired.

## ADJUSTMENTS



### CAUTION

Do not at any time make any adjustment to lawn mower without first stopping engine and disconnecting spark plug wire.

## CUTTING HEIGHT ADJUSTMENT

### Model 282 (with height adjustment brackets)

An adjusting plate and thumb lever at each wheel position provides cutting height adjustment. Each adjusting plate has nine positions. Height of cut will be changed when the thumb lever is moved from one hole to another. Simply depress the lever towards wheel and move wheel and lever assembly to desired position. See figure 17.

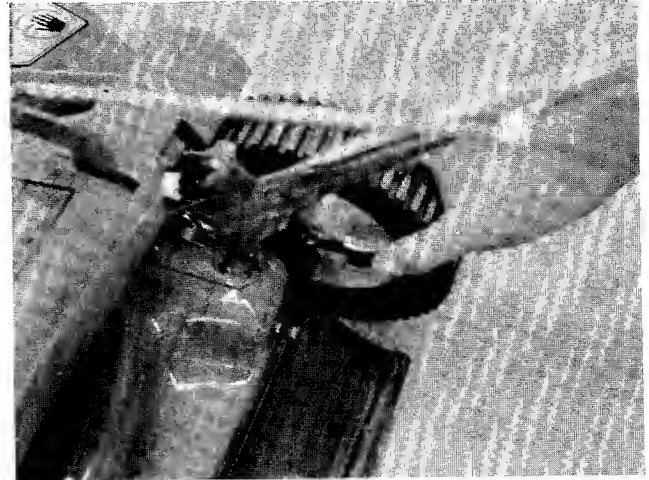


FIGURE 17.

Cutting height will be raised as the rear levers are lowered and the front levers are moved toward the front of the unit. Cutting height will be lowered as the rear levers are raised and the front levers are moved toward the rear of the unit. All wheels must be positioned at the same relative height.

For rough or uneven lawns, move the wheels to a position which will give a higher cutting height.



### NOTE

Clutch rod **must** be adjusted each time cutting height is changed.

### Model 280 (without height adjustment brackets)

Adjustment may be made by removing and moving axle bolts to desired position. Cutting heights will be raised as axle bolts are moved to a lower hole and lowered as axle bolts are moved to a higher hole. All axle bolts must be mounted in the same relative position to the deck.

When changing the height of the front wheels, use the holes closest to the front of the deck. Belleville washers must be assembled on the inside and outside of the deck so that the cupped side of the washers are against the deck.

To change the height of the rear wheels, proceed as follows.

1. Remove the hairpin cotter from ferrule, located on clutch rod.

When sharpening the blade, follow the original angle of grind as a guide. It is **extremely important** that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds, may cause damage to the mower and could break, causing personal injury.

It is recommended that the blade always be removed from the adapter for the best test of balance. The blade can be tested by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.

### C. Reassembly

Before reassembling the blade and the blade adapter to the unit, lubricate the engine crankshaft and the inner surface of the blade adapter with light oil. Lubricating the bolt holes, bolts and inner surface of the nuts with light oil is also recommended. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

When replacing the blade, be sure to install the blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position.

### Blade Mounting Torque

3/8" Dia. Bolt 375 in. lb. min., 450 in. lb. max.

5/16" Dia. Bolt 150 in. lb. min., 250 in. lb. max.

To insure safe operation of your unit, all nuts and bolts must be checked periodically for correct tightness.

To insure safe operation of your unit, all nuts and bolts must be checked periodically for correct tightness.

### DECK

The underside of mower deck should be cleaned after each period of use as grass clippings, leaves, dirt and other matter will accumulate. This accumulation of grass clippings, etc., is undesirable as it will invite rust and corrosion and may cause an uneven discharge of grass clippings at the next cutting.

The deck may be cleaned by tilting the mower forward or on its side and scraping clean with a suitable tool or by washing with a stream of water from a garden hose.



### CAUTION

Do not direct the stream of water at a hot engine as damage to the engine may result.

### ENGINE OIL

Check oil level before starting engine and after every 5 hours of operation. ADD oil as necessary to keep level to full mark on dipstick. Before removing dipstick, clean area around dipstick to prevent dirt from entering oil fill tube. Engine should be in a level position when checking oil.

Change oil after first 5 hours of operation. Thereafter change every 25 hours. Change oil while engine is warm. Oil may be drained thru oil drain on bottom of the engine. Oil capacity 1 1/4 pints.

### AIR CLEANER

Service air cleaner every 25 hours under normal conditions. Clean every few hours under extremely dusty conditions. Poor engine performance and flooding usually indicates that the air cleaner should be serviced.

To service the air cleaner, refer to the separate engine manual packed with your unit.

### SPARK PLUG

The spark plug should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type and gap specifications.

## OFF-SEASON STORAGE

The following steps should be taken to prepare lawn mower for storage.

1. Clean and lubricate mower thoroughly as described in the lubrication instructions.
2. Refer to engine manual for correct engine storage instructions.
3. Coat mower's cutting blade with chassis grease to prevent rusting.
4. Store mower in a dry, clean area.



### CAUTION

When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rust proof the equipment. Using a light oil or silicone, coat the equipment, especially chains, springs, cables and all moving parts.



#### NOTE

The use of an / accessory on this Rotary Mower other than those manufactured by the mower manufacturer is **not** recommended.

GRASS CATCHER Model 003 is available as optional equipment for the mower shown in this manual.



#### WARNING

1. DO NOT operate the mower without the entire grass catcher or chute deflector in place.
2. DO NOT operate the mower without the protective shield on the rear of the deck in place.



#### NOTE

Under normal usage bag material is subject to wear and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag No. 764-0176.

# Trouble Shooting Chart

Problem	Cause	Remedy
1 Engine fails to start	<p>A Blade control handle disengaged</p> <p>B Check fuel tank for gas</p> <p>C Spark plug lead wire disconnected.</p> <p>D Throttle control lever not in the starting position</p> <p>E Faulty spark plug</p> <p>F Carburetor improperly adjusted, engine flooded</p> <p>G Old stale gasoline</p> <p>H Engine brake engaged</p> <p>I Discharged battery</p>	<p>A Engage blade control handle.</p> <p>B Fill tank if empty.</p> <p>C Connect lead wire.</p> <p>D Move throttle lever to start position.</p> <p>E Spark should jump gap between control electrode and side electrode. If spark does not jump, replace the spark plug.</p> <p>F Remove spark plug, dry the plug, crank engine with plug removed, and throttle in off position. Replace spark plug and lead wire and resume starting procedures.</p> <p>G Drain and refill with fresh gasoline.</p> <p>H Follow starting procedure.</p> <p>I Refer to battery charging instructions.</p>
2 Hard starting or loss of power	<p>A Spark plug wire loose</p> <p>B Carburetor improperly adjusted</p> <p>C Dirty air cleaner</p>	<p>A Connect and tighten spark plug wire.</p> <p>B Adjust carburetor. See separate engine manual.</p> <p>C Clean air cleaner as described in separate engine manual.</p>
3 Operation erratic	<p>A Dirt in gas tank</p> <p>B Dirty air cleaner</p> <p>C Water in fuel supply</p> <p>D Vent in gas cap plugged</p> <p>E Carburetor improperly adjusted</p>	<p>A Remove the dirt and fill tank with fresh gas.</p> <p>B Clean air cleaner as described in separate engine manual.</p> <p>C Drain contaminated fuel and fill tank with fresh gas.</p> <p>D Clear vent or replace gas cap.</p> <p>E Adjust carburetor. See separate engine manual.</p>
4 Occasional skip (hesitates) at high speed	<p>A Carburetor idle speed too slow</p> <p>B Spark plug gap too close</p> <p>C Carburetor idle mixture adjustment improperly set</p>	<p>A Adjust carburetor. See separate engine manual.</p> <p>B Adjust to .030".</p> <p>C Adjust carburetor. See separate engine manual.</p>
5 Idles poorly	<p>A Spark plug fouled, faulty, or gap too wide</p> <p>B Carburetor improperly adjusted</p> <p>C Dirty air cleaner</p>	<p>A Reset gap to .030" or replace spark plug.</p> <p>B Adjust carburetor. See separate engine manual.</p> <p>C Clean air cleaner as described in separate engine manual.</p>
6 Engine overheats	<p>A Carburetor not adjusted properly</p> <p>B Air flow restricted</p> <p>C Engine oil level low</p>	<p>A Adjust carburetor. See separate engine manual.</p> <p>B Remove blower housing and clean as described in separate engine manual.</p> <p>C Fill crankcase with the proper oil.</p>
7 Excessive vibration	<p>A Cutting blade loose or unbalanced</p> <p>B Bent cutting blade</p>	<p>A Tighten blade and adapter. Balance blade.</p> <p>B Replace blade.</p>

**Note:** For repairs beyond the minor adjustments listed above, contact your local authorized service dealer.

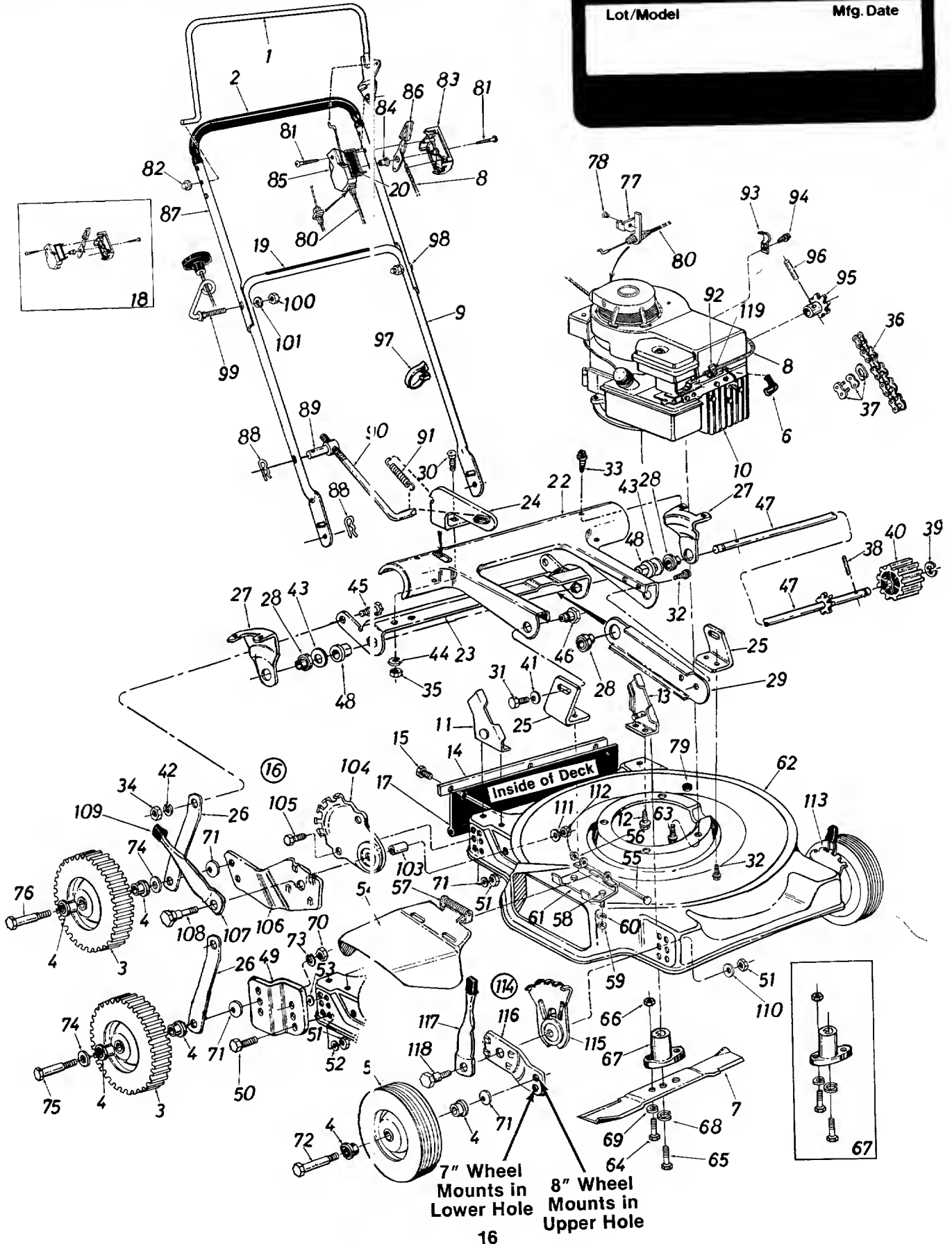


# Models 280 and 282

Meets CPSC Blade Safety Requirements

Lot/Model

Mfg. Date



# Models 280 and 282

## PARTS LIST FOR MODELS 280 AND 282 ROTARY MOWERS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	14321		Control Handle Ass'y.—L.H.		44	736-0329		L-Wash. 1/4" I.D.*	
2	718-0145		Grip (Optional)		45	738-0155		Shld. Bolt .437" Dia. x .162	
3	734-0880		Rear Wheel Ass'y. Comp.— 8 x 1.75		46	738-0529		Shld. Nut .625" Dia. x .162	
4	741-0262		Flange Brg.—Plastic 1/2" I.D.		47	738-0530		Pinion Shaft w/7 Tooth Sprocket	
5	**		Front Wheel Ass'y. Comp.		48	741-0324		Hex Flange Brg. x .506" I.D. Plastic	
6	735-0639		Spark Plug Boot		49	14761		Wheel Brkt. (280 Only)	
7	742-0125		Blade 22"		50	710-0216		Hex Bolt 3/8-16 x .75" Lg.* (280 Only)	
8	746-0474		Throttle Wire—53.0"		51	712-0798		Hex Nut 3/8-16 Thd.*	
9	749-0522		Lower Handle (Chrome)		52	736-0105		Bell-Wash. .400" I.D. x .88" O.D. (280 Only)	
10	749-0521		Lower Handle (Painted)		53	736-0117		FI-Wash. .38" I.D. x .620" O.D. (280 Only)	
11	—		Engine		54	14944		Chute Deflector Ass'y. Comp.	
12	14164		Handle Brkt. Ass'y.—R.H.		55	711-0555		Pivot Pin	
	710-0603		Hex Wash. Hd. "B"-Tap Scr. 5/16-18 x .50" Lg.		56	726-0106		Cap Speed Nut 1/4" Rod	
3	14165		Handle Brkt. Ass'y.—L.H.		57	732-0253		Torsion Spring	
14	14846		Retainer Strip		58	710-0289		Hex Bolt 1/4-20 x .50" Lg.*	
5	710-0776		Hex AB-Tap Scr. 1/4 x .62" Lg.		59	712-0287		Hex Nut 1/4-20 Thd.*	
6	14762		R.H. Height Adj. Comp. (282 Only)	N	60	736-0329		L-Wash. 1/4" I.D.*	
	14763		L.H. Height Adj. Comp. (Not Shown—282 Only)		61	11143		Hinge Plate	
7	731-0575		Rear Flap Ass'y.		62	14999 —462		22" Deck Ass'y.	
8	753-0360		Kit—Control Housing Comp.		63	710-0654		Hex Wash. Hd. TT-Tap Scr. 3/8-16 x 1.0" Lg.	
9	777-3455		Instruction Label—Handle		64	710-0888		Hex Bolt 5/16-24 x 1.00" Lg. (Grade 5)	
0	777-3458		Control Label—Throttle		65	710-0331		Hex Bolt 3/8-24 x 2.25" Lg. (Grade 5)	
2	14755 —462		Pinion Pivot Cover 22"		66	712-0123		Hex Nut 5/16-24 Thd.	
3	14756		Cam		67	753-0348		Blade Adapter Kit	
4	14758		Engagement Arm		68	736-0217		L-Wash. 3/8" I.D.—H.D.	
5	14759		Pivot Brkt.		69	736-0119		L-Wash. 5/16" I.D.*	
6	14760		Link 4.58 x .88		70	712-0798		Hex Nut 3/8-16 Thd.*	
7	14757		Axle Brkt.		71	736-0105		Bell-Wash. .400" I.D. x .88" O.D.	
3	741-0180		Flanged Ball Brg. .500" I.D.		72	738-0213		Front Axle Bolt (280 Only)	
9	14877		Brg. Support			738-0102		Front Axle Bolt (282 Only)	
0	710-0167		Carriage Bolt 1/4-20 x .50" Lg.*		73	736-0169		L-Wash. 3/8" I.D.*	
1	710-0168		Hex Bolt 3/8-16 x .50" Lg.*		74	736-0192		FI-Wash. .531" I.D. x .93" O.D.	
2	710-0352		Hex "B"-Tap Scr. 1/4" x .38" Lg.		75	738-0533		Rear Axle Bolt (280 Only)	
3	710-0776		Hex Wash. Hd. "AB"-Tap Scr. 1/4" x .62" Lg.		76	738-0144		Rear Axle Bolt (282 Only)	
4	712-0267		Hex Nut 5/16-18 Thd.*		77	14924		Cable Bracket	
5	712-0287		Hex Nut 1/4-20 Thd.*		78	728-0171		Pop Rivet .156" Dia. x .379	
3	713-0311		#48 Chain 1/2" Pitch 49 Links		79	731-0564		Plug	
	713-0116		#48 Master Link (Service Only)		80	746-0476		Control Cable—39.0"	
	715-0246		Spring Pin Spir. 3/16" Dia. x 1.25" Lg.		81	710-0796		Truss Mach. Self-Tap Scr. #12 x 1.50" Lg.	
	716-0104		"E"-Ring for .500" Dia. Shaft		82	726-0135		Cap Speed Nut 5/16" Rod	
	731-0393		Drive Pinion		83	731-0523		Control Panel Half	
	736-0105		Bell-Wash. .400" I.D. x .88" O.D. x .060		84	731-0524		Control Disc Pin	
	736-0119		L-Wash. 5/16" I.D.*		85	731-0526		Clutch Panel Half	
	736-0160		FI-Wash. .531" I.D. x .930" O.D. x .050		86	731-0528		Throttle Control Lever	

# Models 280 and 282

## PARTS LIST FOR MODELS 280 AND 282 ROTARY MOWERS (CONTINUED)

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
87	749-0536		Upper Handle (Chrome)	N	107	732-0417		Spring Lever (282 Only)	
	749-0538		Upper Handle (Painted)		108	738-0528		Shoulder Bolt .500" Dia. x 3.75" Lg. (282 Only)	
88	714-0104		Hairpin Cotter		109	720-0190		Spring Lever Knob (282 Only)	
89	711-0570		Ferrule		110	736-0331		Bell-Wash. .39 I.D. x 1.13 O.D. (280 Only)	
90	747-0392		Clutch Rod			736-0356		Bell-Wash. .39 I.D. x 1.4 O.D. (282 Only)	
91	732-0418		Extension Spring—3/8" O.D. x 2.10" Lg.		111	736-0242		Bell-Wash. .336" I.D. x .860 O.D. (282 Only)	
92	751-0369		Casing Clamp		112	712-0158		Hex L-Nut 5/16-18 Thd. (282 Only)	
93	12894		Casing Clamp		113	14579		Height Adj. Ass'y.—Comp.—L.H. (282 Only)	
94	710-0429		Hex "B"-Tap Scr. #10 x .38"		114	14578		Height Adj. Ass'y.—Comp.—R.H. (282 Only)	
95	713-0308		10 Tooth Sprocket Ass'y.		115	15261		Height Adj. Plate (282 Only)	
96	715-0247		Spiral Pin 3/16" Dia. x .00"		116	15262		Pivot Bar (282 Only)	
97	726-0192		Cable Tie		117	14832		Spring Lever Ass'y. w/Knob (282 Only)	
98	710-0671		Curved Hd. Carriage Bolt 5/16-18 x 1.38" Lg.		118	738-0507		Shoulder Bolt .500" Dia. x .375" Lg. (282 Only)	
99	710-0842		Rope Guide Bolt		119	710-0227		Hex Wash. Hd. AB-Tap Scr. #8 x .38" Lg.	
100	712-0267		Hex Nut 5/16-18 Thd.*						
101	736-0119		L-Wash. 5/16" I.D.*						
103	750-0503		Spacer .395" I.D. x .503" O.D. x .562" Lg. (282 Only)						
104	14764		Index Plate (282 Only)						
105	710-0216		Hex Bolt 3/8-16 x .75" .g.* (282 Only)						
106	14765		Pivot Bar R.H. (282 On y)						
	14766		Pivot Bar L.H. (Not Shown) (282 Only)						

### \*\*FRONT WHEEL CHART

	Waffle Tread	Twinline Tread	Smooth
7" x 1.50"	734-0893	734-0876	734-0842
8" x 1.75"	734-0812	734-0661	734-0843

\*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(462—Red Flake)

When ordering parts, if color or finish is important, use the appropriate color code shown above. (e.g. Red Flake Finish—14005 (462).)

### Hub Caps Available

Color	Part No.
Red	731-0124
Orange	731-0254
Black	731-0354
Gray	731-0355

NOTE: The engine is not under warranty by the mower manufacturer...If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."



This instruction manual covers various models and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

# PARTS INFORMATION

## POWER EQUIPMENT PARTS AND SERVICE

Parts and service are available through the authorized service firms listed below. All orders should specify the model number of your unit, part numbers, description of parts and the quantity of each part required.

**NOTE:** If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

<b>ALABAMA</b>	<b>BIRMINGHAM</b>
Auto Electric & Carburetor Co. . . . .	2625 4th Ave. S. . . . .35233
<b>ARKANSAS</b>	<b>NORTH LITTLE ROCK</b>
Sutton's Lawn Mower Shop . . . . .	5301 Roundtop Drive
	Box 368, Rt. 4 . . . . .72117
<b>CALIFORNIA</b>	<b>PORTERVILLE</b>
Billious . . . . .	75 North D Street . . . . .93257
<b>COLORADO</b>	<b>DENVER</b>
Spitzer Industrial Products Co. . . . .	6601 N.
	Washington St. . . . .80229
<b>FLORIDA</b>	<b>JACKSONVILLE</b>
Radco Distributors . . . . .	4909 Victor St.
	Box 5459 . . . . .32207
	<b>OPA LOCKA</b>
Small Eng. Dist. . . . .	2351 N.W. 147th St. . . . .33054
<b>GEORGIA</b>	<b>EAST POINT</b>
East Point Cycle & Key . . . . .	2834 Church St. . . . .30344
<b>ILLINOIS</b>	<b>LYONS</b>
Keen Edge Co. . . . .	8615 Ogden Ave. . . . .60534
<b>INDIANA</b>	<b>ELKHART</b>
Parts & Sales Inc. . . . .	2101 Industrial Pkwy . . . . .46516
<b>IOWA</b>	<b>DUBUQUE</b>
Power Lawn & Garden Equip. . . . .	2551 J.F. Kennedy . . . . .52001
<b>LOUISIANA</b>	<b>NEW ORLEANS</b>
Suhren Engine Co. . . . .	8330 Earhart Blvd. . . . .70118
<b>MARYLAND</b>	<b>TAKOMA PARK</b>
Center Supply Co. . . . .	6867 New Hampshire
	Ave. . . . .20912
<b>MASSACHUSETTS</b>	<b>SPRINGFIELD</b>
Morton B. Collins Co. . . . .	300 Birnie Ave. . . . .01107
<b>MICHIGAN</b>	<b>LANSING</b>
Lorenz Service Co. . . . .	2500 S. Pennsylvania . . . . .48910
	<b>MOUNT CLEMENS</b>
Power Equipment Dist. . . . .	340 Hubbard . . . . .48043
<b>MINNESOTA</b>	<b>HOPKINS</b>
Hance Distributing Inc. . . . .	420 Excelsior Ave. W. . . . .55343
<b>MISSISSIPPI</b>	<b>BILOXI</b>
Biloxi Sales & Service, Inc. . . . .	506 Caillavet St. . . . .39533
<b>MISSOURI</b>	<b>KANSAS CITY</b>
Automotive Equip. Service . . . . .	3117 Holmes St. . . . .64109
	<b>ST. JOSEPH</b>
Ross-Frazier Supply Co. . . . .	8th and Monterey . . . . .64503
	<b>ST. LOUIS</b>
Henzler, Inc. . . . .	2015 Lemay Ferry Rtl. . . . .63125
<b>NEW JERSEY</b>	<b>BELLMAR</b>
Lawnmower Parts Inc. . . . .	717 Creek Rd. . . . .08030
<b>NEW MEXICO</b>	<b>ALBUQUERQUE</b>
Spitzer Eng. & Parts . . . . .	1023 Third Ave. N.W. . . . .87103
<b>NEW YORK</b>	<b>CARTHAGE</b>
Gamble Dist., Inc. . . . .	West End Ave. . . . .13619
	<b>SCHOHARIE</b>
Red Fox Parts Dist. . . . .	Rt. 30 P.O. Box 527 . . . . .12157

## BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and serv should be handled by your nearest authorized engine service fir. Check the yellow pages of your telephone directory under the listing **Engines—Gasoline**, Briggs & Stratton or Tecumseh Lauson.

<b>NORTH CAROLINA</b>	<b>GOLDSBORO</b>
Smith Hardware Co. . . . .	515 N. George St. . . . .27530
	<b>GREENSBORO</b>
Dixie Sales Company . . . . .	335 N. Green . . . . .27402
<b>OHIO</b>	<b>CARROLL</b>
Stebe's Mid-State Mower Supply . . . . .	Box 366, 71 High St. . . . .43112
	<b>CLEVELAND</b>
Bleckrie, Inc. . . . .	7900 Lorain Ave. . . . .44102
National Central . . . . .	<b>WADSWORTH</b>
	687 Seville Rd. . . . .44281
Burton Supply Co. . . . .	<b>YOUNGSTOWN</b>
	1301 Logan Ave.
	Box 929 . . . . .44501
<b>OKLAHOMA</b>	<b>MUSKOGEE</b>
Victory Motors, Inc. . . . .	605 S. Cherokee . . . . .74401
<b>OREGON</b>	<b>PORTLAND</b>
Kenton Supply Co. . . . .	8216 N. Denver Ave. . . . .97217
<b>PENNSYLVANIA</b>	<b>HARRISBURG</b>
EECO Inc. . . . .	4021 N. 6th St. . . . .17110
	<b>PHILADELPHIA</b>
Thompson Rubber Co. . . . .	5222-24 N. Fifth St. . . . .19120
	<b>PITTSBURGH</b>
Bluemont Co. . . . .	11125 Frankstown Rd. . . . .15235
Frank Roberts & Sons . . . . .	<b>PUNXSUTAWNEY</b>
	R.D. 2 . . . . .15767
Scranton Auto Ignition Co. . . . .	<b>SCRANTON</b>
	1133-35 Wyoming Ave. . . . .18509
<b>TENNESSEE</b>	<b>KNOXVILLE</b>
Master Repair Service . . . . .	2000 Western Ave. . . . .376
	<b>MEMPHIS</b>
American Sales & Service, Inc. . . . .	3035-43 Bellbrook . . . . .38116
<b>TEXAS</b>	<b>DALLAS</b>
Marr Brothers, Inc. . . . .	423 E. Jefferson . . . . .75203
	<b>FORT WORTH</b>
Woodson Sales Corp. . . . .	1702 N. Sylvania . . . . .76111
	<b>HOUSTON</b>
Bullard Supply Co. . . . .	2409 Commerce St. . . . .77003
	<b>SAN ANTONIO</b>
Engine House Inc. . . . .	8610 Botts Lane
	P.O. Box 17867 . . . . .78217
<b>UTAH</b>	<b>SALT LAKE CITY</b>
A-1 Engine & Mower Co. . . . .	439 E. 900 So. . . . .84111
<b>VIRGINIA</b>	<b>ASHLAND</b>
RBI Corp. . . . .	101 Cedar Ridge Dr. . . . .23005
<b>WASHINGTON</b>	<b>SEATTLE</b>
Bailey's Inc. . . . .	1414 14th Ave. . . . .98122
<b>WISCONSIN</b>	<b>APPLETON</b>
Automotive Supply Co. . . . .	123 S. Linwood Ave.
	P.O. Box 798 . . . . .54911
	<b>CHILTON</b>
Horst Dist. . . . .	444 N. Madison . . . . .53014

## WARRANTY PARTS AND SERVICE POLICY

(0783)

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

### CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

1. Replacement of Missing Parts on new equipment.
2. Replacement of Defective Parts within the warranty period.
3. Repair of Defects within the warranty period.

All claims MUST be substantiated with the following information:

1. Model Number of unit involved.
2. Date unit was purchased or first put into service.
3. Date of failure.
4. Nature of failure.